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OM nucleic - nucleic search, using sw model

Run on: September 7, 2001, 13:55:08 : Search time 65.24 Seconds
(without alignments)
3456.002 Million cell updates/sec

Title: US-08-900-220C-8

Perfect score: 1191

Sequence: 1 ATGGCTCTCCGACCAATCT.....CGAGAGACTACTGGGCTGA 1191

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 324599 seqs, 9465562 residues

Total number of hits satisfying chosen parameters: 649198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents_NA:*

- 1: /cgn2_6/prodata/2/lna/5A.COMB.seq:*
- 2: /cgn2_6/prodata/2/lna/5B.COMB.seq:*
- 3: /cgn2_6/prodata/2/lna/6A.COMB.seq:*
- 4: /cgn2_6/prodata/2/lna/6B.COMB.seq:*
- 5: /cgn2_6/prodata/2/lna/PCRBUS.COMB.seq:*
- 6: /cgn2_6/prodata/2/lna/Backfillseq1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	967.6	81.2	1190	1	US-08-176-427B-3
2	967.6	81.2	1190	2	US-08-356-060A-2
3	967.6	81.2	1190	4	US-08-460-900C-2
4	427.8	35.9	1281	1	US-08-460-900C-3
5	419.8	35.2	1313	1	US-08-176-427B-7
6	419.8	35.2	1313	2	US-08-356-060A-4
7	419.8	35.2	1313	4	US-08-460-900C-4
8	407	34.2	1715	4	US-08-757-230A-1
9	407	34.2	1715	5	PCR-US95-02315-1
10	390.6	32.8	1425	4	US-08-356-060A-6
11	390.6	32.8	1425	4	US-08-460-900C-6
12	389	32.7	1576	1	US-08-748-591-5
13	389	32.7	1576	1	US-08-748-591-10
14	381.4	32.0	1277	1	US-08-176-427B-1
15	381.4	32.0	1277	2	US-08-356-060A-1
16	381.4	32.0	1277	4	US-08-460-900C-1
17	355.8	29.9	1056	1	US-08-176-427B-5
18	355.8	29.9	1056	2	US-08-356-060A-3
19	335.6	28.2	939	4	US-08-356-060A-7
20	335.6	28.2	939	4	US-08-460-900C-7
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22	316.2	26.5	1256	2	US-08-356-060A-5
23	316.2	26.5	1256	4	US-08-460-900C-5
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28	101.4	8.5	144	5	PCR-US95-15923-2	Sequence 2, App11
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31	99.8	8.4	144	4	US-08-729-743A-1	Sequence 1, App11
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40	43	3.6	2504	1	US-08-481-238-3	Sequence 3, App11
41	43	3.6	2504	2	US-08-471-066B-3	Sequence 3, App11
42	43	3.6	2504	2	US-08-484-956-3	Sequence 3, App11
43	43	3.6	2504	2	US-08-757-653-3	Sequence 3, App11
44	43	3.6	2504	2	US-08-599-491-3	Sequence 3, App11
45	43	3.6	2504	2	US-08-756-386-3	Sequence 3, App11

ALIGNMENTS

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RESULT 1
US-08-176-427B-3
; Sequence 3, Application US/08176427B
; Patent No. 5789543
; GENERAL INFORMATION:
; APPLICANT: Ingham, Phillip W.
; APPLICANT: McMahon, Andrew P.
; APPLICANT: Tablin, Clifford J.
; TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street
; City: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: ASCII(text)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/176,427B
; FILING DATE: 30-DEC-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: HMI-006
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1190 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: both
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1191
; US-08-176-427B-3

Query Match      81.2%; Score 967.6; DB 1; Length 1190;
Best Local Similarity 88.3%; Pred. No. 1.4e-193;
Matches 1051; Conservative 0; Mismatches 139; Indels 0; Gaps 0;
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1 ATGGCTCTCTGACCAATCTACTGCCCTTGTGCTGGGACCTTGTGGCGCTGCCAGCC 60
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QY 61 CAGAGCTGG 120
61 CAGAGCTGG 120
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DB 781 CCTCCACGCAAACTGTGCTCAGCGCTGAGCGCTGAGCTGTGCGCTGAGGCGCGGCG 840
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RESULT 2
US-08-356-060A-2
Sequence 2, Application US/08356060A
Patent No. 5844079
GENERAL INFORMATION:
APPLICANT: Ingham, Phillip W.
APPLICANT: McMahon, Andrew P.
APPLICANT: Tablin, Clifford J.
TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII(text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/356,060A
FILING DATE: 14-DEC-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/176,427
FILING DATE: 30-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: HMT-006CP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ. ID NO. 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1190 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: linear
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1191
US-08-356-060A-2

Query Match 81.2%; Score 967.6; DB 2; Length 1190;
Best Local Similarity 88.3%; Pred. No. 1.4e-193;
Matches 1051; Conservative 0; Mismatches 139; Indels 0; Gaps 0;

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QY	781	CCCTCCAGGCAAACTGTGTCTACACCCCTGGCATCTGTGTGCTGTGCGCGGCGCAGCG	840
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Sequence 2 Application US/08460900C
Patent No. 6165747
GENERAL INFORMATION:
APPLICANT: Ingham, Phillip W.
APPLICANT: McMahon, Andrew P.
APPLICANT: Tabin, Clifford J.
APPLICANT: Bumcrot, David A.
APPLICANT: Marti-Gorostiza, Elisa
TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
TITLE OF INVENTION: Proteins and Uses Related Thereto
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY, HOAG & ERIOT LLP
STREET: One Post Office Square
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/460,900C
FILING DATE: 5-JUNE-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/435,093
FILING DATE: 4-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/356,060
FILING DATE: 14-DEC-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/176,427
FILING DATE: 30-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: NHV-006.05
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 832-1000
TELEFAX: (617) 832-7000
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1190 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: linear
MOLECULE TYPE: CDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1188
US-08-460-900C-2
Query Match 81.2%; Score 967.6; DB 4; Length 1190;
Best Local Similarity 88.3%; Pred. No. 1.4e-193;
Matches 1051; Conservative 0; Mismatches 139; Indels 0; Gaps 0;
QY 1 ATGGCTCTCCTACCAACTACTGCGCTTGTGCTGCTGGCACTTCTGGCGGTGCCAGCC 60
DB 1 ATGGCTCTGCGCGGCAAGTCTGTGGCCCTGTGCTGCTGGCACTCTGGCACTACTGTGC 60
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DB 61 CAGAGCTGGGGGCGGGGCGGGGCGGACCGGTGGCGCGGCGCGTATGTGGCAAGCACTT 120
QY 121 GTGCCGCTACTCTACCAAGCACTTGTGCGCGGCGTGGCCAGAGCGGACCCGTGGCGCCACT 180
DB 121 GTGCCGCTACTCTACCAAGCACTTGTGCGCGGCGTGGCCAGAGCGGACCCGTGGCGCCACT 180
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DB 121 GTGCCGCTACTCTACCAAGCACTTGTGCGCGGCGTGGCCAGAGCGGACCCGTGGCGCCACT 180
QY 181 GGGCCACGGCGGAGGAGGAGGTGGCAGAGGGGCTCCGAGCGCTTCCGGGAGCTCTGTGCCCAAC 240
DB 181 GGGCCACGGCGGAGGAGGAGGTGGCAGAGGGGCTCCGAGCGCTTCCGGGAGCTCTGTGCCCAAC 240

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QY 641 AAGGCTGGGGAAGTGCACCGCGAGACTGGTTTGGCGGCGATGCGTACAGCCGGG 700
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1313 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: both
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1314
US-08-356-060A-4

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QY 869 TGGCGGCGCGCGCTGAGCGGCTGGGAGCTCGTGTGTGCGCGCGCGCGCGCGGGA---TGCCTTC 925
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Db 1121 CCGCGCT 1127

RESULT 6
US-08-356-060A-4
; Sequence 4, Application US/08356060A
; Patent No. 5844079
; GENERAL INFORMATION:
; APPLICANT: Ingham, Phillip W.
; APPLICANT: McMahon, Andrew P.
; APPLICANT: Tablin, Clifford J.
; TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
; NUMBER OF INVENTION: Proteins and Uses Related Thereto
; CORRESPONDENCE ADDRESS:
; ADDRESS: LAHIVE & COCKFIELD
; STREET: 60 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII(text)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/356,060A
; FILING DATE: 14-DEC-1994
; CLASSIFICATION: 435
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 08/176,427
; FILING DATE: 30-DEC-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: HMI-006CP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400

QY 41 CACTTCTGGCGCTGCCAGCCAGAGCTGCGGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 100
Db 47 CCGTGTGCTGTGCG 106
QY 101 GCTATGCGCGCAAGCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 160
Db 107 AC-----CCCAAAAGCTGACCGCTTGTAGCTTACAGAGGATTTATCCACGTAAGCG 160
QY 161 AGCGACCTGCGGCGCGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCT 220
Db 161 AGAAGACCTTAGGCT 220
QY 221 TCCGCGACCTGCTGCCCACTACACACCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 280
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QY 461 GCGACCGCAAGATGTGCG 520
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QY 521 TCTACTACGAGTCCGCAACAGCTCCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 580
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QY 581 TCGGCGCGCGCGCGCTTTCGCGGAAATGCACTGCTGCTGCTGCTGCTGCTGCTGCTG 640
Db 581 CCAAAATCCGCGCGCTGCTTTCGCGGAAATGCACTGCTGCTGCTGCTGCTGCTGCTG 640
QY 641 AAGGCGTGGGAACTGCAACCGCGAGTGGGTTTGGCGCGCGCGCGCGCGCGCGCGCG 700
Db 641 AAGGCGTGGGAACTGCAACCGCGAGTGGGTTTGGCGCGCGCGCGCGCGCGCGCGCG 700
QY 701 TGGTGGCCACGCGGCTGCTGCTTCTTCTGAGCGGAGCTTGCAGCGCCGCGGCTTCAATTG 760
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QY 761 TGGCTGTGAGACCGAGTGGCTTCCAGCAACTGTGCTACAGCCCTGGCACTGCTGTTG 820
Db 761 ACCTGATCGAGACGCTGAGAGCCCGCGAGCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 820
QY 821 TTGCGGCTC-----GAGGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCTTGC 868
Db 821 TGGTGGCGCGCGCAACAGACTCGGGGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 880

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; FEATURE: NAME/REV: CDS
; LOCATION: 1.1311
US-08-460-900C-4

Query Match      35.28; Score 419.8; DB 4; Length 1313;
Best Local Similarity 64.5%; Pred No. 1.9e-79;
Matches 701; Conservative 0; Mismatches 362; Indels 24; Gaps

QY 41 CACTCTGTGGCGCTGGCCAGGCCAGAGCTGGGGGCGGGGCCGGTGGCGGGCGCC 100
DB 47 GCCTGTGTGTGTGTGCCCCGGGGCTGGGCTGTGGGGCCGGCAGAGGGGTTTGGAAAGAGCGGG 106
QY 101 GCTATGCGCGCAGACAGCTGTGCGGCTACTCTACAGCAATTTTGTCCCGGCTGCCAG 160
DB 107 AC-----CCCAAAAAGCTTGACCCCTTTTGTAGCTACAAAGCAGTTTATTCCTCCAGTACGCG 160
QY 161 ACCGACACCTTGGGGCCACTTGGGGCCAGCGGAGGGAGGGTGGCAGAGGGGCTCCGACGCT 220
DB 161 ACAAGACCTTGAAGGGCGACGGGAGATATGAAAGGAAATCACAAAGAACTCCGAACGAT 220
QY 221 TCCGGGACCTTCGTGCCCACTACAAACCCGACATCATCTTCAAGATGTGAGAGAACAGTG 280
DB 221 TTAAAGAACTACACCCCAATTACAAACCCGACATCATATTATTAAGATGTGAGAAACACGG 280
QY 281 GAGCGGACCGCGCTGATGACCGAGCGTTGCAAGAGAGAGGTGAACGTTTGGCCATTGCCG 340
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QY 341 TGAATGAACATGTGGCCCGGAGTGCGCTTACAGTACTAGAGGCTTGGACAGAGACGGCC 400
DB 341 TGATGAACACAGTGGCGCTTGAGTGAGGCTCAGAGTGACCAAGGGCTTGAGTGAAGAGCGCC 400
QY 401 ACCAGCGCTAGGATTCACATCCACTAGAGAGGCGGCTTTGGACATCACTAGCTGTGAC 460
DB 401 ATCATTTAGAGGAGTCTTACACTATGAGAGGTGTGACAGTGGACATACACACTCCGAC 460
QY 461 GCGACCGCAACAAGTATGTGGTTGCTGGCGCGCTTCAGTGTGAAGCGCGCTTGACTGGG 520
DB 461 GGGACCGCAGCAAGTACGGCATGTGCGCTGCGCTGTGGAGAGAGGTTTGCACTGGG 520
QY 521 TCTACTACGAGTCCGCGAACACAGTCCACAGTGTGCGTCAAAGCTGATTACTACTGGCGG 580
DB 521 TCTACTATGAATCCAAAGTCAATCACTGTTCTGTGAAGCAGAGAACTCGTGGCGG 580
QY 581 TCCGGGCGGGCGGCTGCTTTCGGGGAATGCAACTGTGGCGCTGTGTGAGACGGCGAGACGA 640
DB 581 CCAAAATCCCGCGCGCTTTTCCGGGATCCGCCACCGTGAACCTGTGAGCAGGCGGGACCA 640
QY 641 AAGGCGTGGGGAACTGCACCGCGGAGACTGGGTTTGGCGGCGCAATGCGTCAAGCGCGG 700
DB 641 ACCTGTGTAAGAACTTACGTCCCGGAGACCGGCTGCTGGCGGCTGTGACGACAGAGCGCGG 700
QY 701 TGGTGCCCAAGCGCGGTGCTCTTTCCTGGACCGGGACTTGCAGCGCGGGCTTCAATTGG 760
DB 701 TCGTGTACAGCACTTCCTCACCTTCCTGTGACCGCAGCAAGGAGCGCCAAAGAAAGTCTTCT 760
QY 761 TGGCTGTGAGAGACCAAGTGTGGCTCCACGCAAAACTGTGTGTCTACAGCGCTGTGCACTGTGT 820
DB 761 ACGTGATGCACAGCTGTGAGGAGCGCGGAGACGCGCTGTGTCTTACACCGCGCGCATCTCTCT 820
QY 821 TTGCGCGCT-----GAGGGCGCGGCGCGCGCGGCGAGCGACTTGTGACACCGGTG 868
DB 821 TGTGTGCGCGCGCAGACAAACGACTGGGGGCCACGCGCGGGCCAGCGGGCTTGTGGCAGGCC 880
QY 869 TGCAGCGCGCGGCTAGCGCGTGGGAGACTGAGTCTGTGGCGCGCGCGCGGGG--TGCGCTTC 925
DB 881 GCGTGGCGCGCGCGGAGCGCGTGTACGTGTGTGAGTGAACGCGCGGGGAGACCGCGCGCTCG 940
QY 926 GGGCAGAGCGGCGTGGCGCGTGTGGC---CGGGAGGAAGAACGCTGGGCGGTGTTCGCGCGCG 982
DB 941 TGCAGCGCGCGGCTGTGACACAGCTGTGAGCGCTGTGAGAGAGAGAGGCGGGCGCGTACGCGCGCG 1000

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Query Match 32.8%; Score 390.6; DB 4; Length 1425;
 Best Local Similarity 61.9%; Pred. No. 2.3e-73;
 Matches 711; Conservative 0; Mismatches 369; Indels 69; Gaps 3;

18 TCTACTGCCCCCTTGTGCTGTGACCTTCTGCGCTGCGACCCAGACAGTCCGGGCGG 77
 21 TCTGCTGCTAGTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 80
 78 CCGGGGGCGCGTGGCGCGCGCGCTATGCGCGCAACGACCTGCGCTACTCTACAA 137
 81 CAGGGGGTTCGGAGAGAGGAGC-----CCCAAAAAGCTGACCCCTTTAGCTACAA 134
 138 GCAATTTGTGCGCGCGCTGCGAGAGCGACCTGCGCGCGCGAGGCGCGAGGAG 197
 135 GCAATTTATCCCAATGTGCGCGAGAACCTTAGCGCGCGAGAGATGAGAGGAA 194
 198 GGTGGCAAGGGGCTCCGAGCGCTTCGCGGACCTCGGCCCACTACAAACCCGACATCAT 257
 195 GATCTCCAGAACTCCGAGGATTTAGGAATCACCCTCAATTAACCCCGACATCAT 254
 258 CTTCAGAGATGAGAGAAACAGTGGAGCGCGACCGCTGATACCGAGCGTTGCAAGAGAG 317
 255 ATTTAAGATGAAAGAAACACCGAGCGGAGAGCTGATCTCAGAGGTGTAAAGCAA 314
 318 GGTGAACGCTTTGGCGCTTCCGATGATGAACATGTGCGCGGAGTGGCGCTACGAGTAC 377
 315 GTTGAACGCTTTGGCGCTTCCGATGATGAACATGTGCGCGGAGTGAACCTGCGGTGAC 374
 378 TGAAGGCTGGGAGAGAGAGCGGACCAACGCTCAGATTCATCTCCATACGAAAGCCGTGC 437
 375 CGAGGGCTGGGAGAGAGATGCGCACCACTCAGAGAGTCTCTGCTACAGAGGCGCGCGC 434
 438 TTTGAGCATACTACGCTCTACCGCGCACCGCAACAGTATGGTGTCTGGCGCGCTGCGC 497
 435 AGTGAACATACCAACGCTCTACCGCGCACCGCAACAGTATGGTGTCTGGCGCGCTGCGC 494
 498 AGTGAAGCGCGGCTTGTGCTGTCTACGAGTCCCGCAACGCTCCACGCTGCGGT 557
 495 GGTGGAGCGCGGCTTGTGCTGTCTACGAGTCCCGCAACGCTCCACGCTGCGGT 554
 558 CAAAGTGTATACTACCTACGCGGCTCCGCGGCGCGGCTTCCGCGGAAATGCAACTGT 617
 555 GAAAGCAGAGACTCGGCTGCGCGGCAATGCGGAGGCTGCTCCGCGGCTCGGCGACGCT 614
 618 GCGGCTTGGAGAGGCGGCAAGGCGGCGGAACTGCGCGGAGACTGCGGCGGAGTGT 677
 615 GCACCTGAGACAGGCGGCGCAAGCTGTGTAAGAGACTAGCGCGGCGGCGCGCTGCT 674
 678 GCGGCGCGATGCTCAGAGCGCGGCTGTGCGCGCGCGGCTGCTGCTGCTGCGAGCGGGA 737
 675 GCGGCGCGAGACAGGCGCGGCTGTGCTGTACAGGAGACTTCTCTCTGAGCGCGGA 734
 738 CTTCGACAGCGCGGCTTCAATTTGTGCTGTGAGAGACGAGTGGCTTCACGCAAACTGT 797
 735 CGAGCGGCGCAAGAGGCTTCTACGATGATGAGAGCGGAGAGCGCGGCGCGCTGCT 794
 798 GCTCAGCGCTTGGGACCTGTGTTGCGCG-----TCGAGGCGCGCGCGCGCGC 846
 795 GCTCAGCGCTTGGGACCTGTGTTGCGCG-----TCGAGGCGCGCGCGCGCGC 854
 847 CCAAGGCACTTTGACAGCGGCTGTGCGCGCGCGGCTACGCGTGGGAGACTGCGTGGCG 906
 855 CAGAGCGCTCTCGGCGCTCGGCGCGCGCTTTCGCGGCGCGCACTGGGCGCTGCGCGCTGTT 914
 907 CCGGCGCGGATGCGCTTTCGCGCGCGCGGCTGCGCGCTG----- 946
 915 CCGCAGCGCGGTGCGCGCGCGCGCGCTGCTGAGGCGCGAGGTGAGCGGAGCG 974
 947 -----TGGCGCGGAGAGAAACCTGGGCGCTT 974
 975 CCGGCTTCTGCGCGCGCTGTGCAACAGCGTAAAGAGAGCGCGCGCGCGCTTA 1034
 975 CCGGCGCGCTACCGCGCGAGGAGGCTGTGTGTAACGATGCTGCGCTTGTGCTACGC 1034

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 Db 1035 CCGCGCGCTACAGCGCCAGGCGACCATTTCTATCAACCGGCTGTGCGCTGCTACGC 1094
 1035 GGTTCGTGAGAGTCCACCATGTTGGCGCACCGCGCTTTTGGCCCTTGAAGTGTGACAGC 1094
 1095 GGTGATGAGAGAGACAGAGTGGCGGACCGGCGCTTGGCGCGCTTGGCGCGCTGCGGAGC 1154
 1095 GCTAGGCGC 1103
 1155 GCTGCTGCGC 1163

RESULT 12
 US-08-748-591-5
 ; Sequence 5, Application US/08748591
 ; Patent No. 5759811
 ; GENERAL INFORMATION:
 ; APPLICANT: Epstein, Ervin
 ; APPLICANT: Hu, Zhilan
 ; APPLICANT: Bonifas, Jeanette
 ; TITLE OF INVENTION: Mutant Human Hedgehog Gene
 ; NUMBER OF SEQUENCES: 23
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Fish and Richardson
 ; STREET: 2200 Sand Hill Road
 ; CITY: Menlo Park
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94025
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/748,591
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Sherwood, Pamela J
 ; REGISTRATION NUMBER: 36,677
 ; REFERENCE/DOCKET NUMBER: 06510/067001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 322-5070
 ; TELEFAX: (415) 854-0875
 ; INFORMATION FOR SEQ ID NO: 5:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 1576 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 ; US-08-748-591-5

Query Match 32.7%; Score 389; DB 1; Length 1576;
 Best Local Similarity 61.8%; Pred. No. 5.1e-73;
 Matches 710; Conservative 0; Mismatches 370; Indels 69; Gaps 3;

18 TCTACTGCCCCCTTGTGCTGTGACCTTCTGCGCTGCGACCCAGACAGTCCGGGCGG 77
 172 TCTGCTGCTAGTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 231
 78 CCGGGGGCGCGTGGCGCGCGCGCTATGCGCGCAACGACGCTGCGCGCTACTCTACAA 137
 232 CAGGGGGTTCGGAGAGAGGAGC-----CCCAAAAAGCTGACCCCTTTAGCTACAA 285
 138 GCAATTTGTGCGCGCGCTTCCAGAGCGGACCTTGGGCGCGCAAGTGGCGGAGAGGAG 197
 286 GCAATTTATCCCAATGTGCGCGGAGAGACCTTAGGCGCGCAAGGATGATGAGAGGAA 345
 198 GGTGGCAAGGGGCTCCGAGGCGCTTCCGAGAGCTGCTGCGCAACGACCCGACATCAT 257

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Db 346 GATCTCCAGAAATCCGACGATTTTAAAGAACTCACCCTCCAAATTAACACCCGACATCAT 405
QY 258 CTTCAGAGATGAGAGACAGTGAACCCGACCCCTGATAGACCGCTTGGACAGAGAG 317
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 406 ATTTAAGATGAAGAAACACCGGACCGACAGGCTGATGACTCAAGGTGTAAGACAA 465
QY 318 GGTGAACGCTTTGGCCATTGCCGTATGAACATGTGGCCCGGAGTGGCTTACAGATGAC 377
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 466 GTTGAACGCTTTGGCCATTGCCGTATGAACAGTGGCCAGGAGTGAACCTGGGCTGAC 525
QY 378 TGAGGCTGGAGAGAGAGGACACAGCTCAGATTCATCCATACAGAGGCGCTGAT 437
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 526 CGAGGCTGGAGAGAGATGAGTACCTACAGAGAGTCTTGCTACTACAGAGGCGCGC 585
QY 438 TTGAGCATCTACTACTGCTGACCGGACCGCAACAAGTATGGTTGCTGGCGCTCCG 497
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 586 AGTGAACATCACACAGCTGACCGCGGACCGCAAGTACGGATCTGCGCCGCTGGC 645
QY 498 AGTGAACGCGGCTTGCATGGGTCTACTACAGAGTCCGCAACACACGTCACGTGCTG 557
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 646 GGTGGAGCGCGCTTGCATGGGTCTACTACAGAGTCCAGACATATCCACTGCTGCT 705
QY 558 CAAAGCTGATTACTACTGCGGCTCCGGGCGGCGGCTTCCGGAAATGCAACTCT 617
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 706 GAAAGAGAAACTCGGTGGCGCAAAATCGGAGGCTCTTCCGCGCTCGCGCAGGT 765
QY 618 GCGCCTGTGAGACCGGACGGAAGAGGCTGCGGAACTGACACCGGAGAGACTGGATT 677
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 766 GCACCTGGAGACAGGCGGACCAAGCTGTGAAGAGACTGAGACCCCGGAGCGCTGCT 825
QY 678 GCGGCGCATGCGTCAGGCGGCGGTGCTGCCACGCGGCTGCTCTTCTGACCGGGA 737
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 826 GCGGCGGAGACCAAGGCGCGCTGCTTACAGAGCACTTCTTCTGACCGGCA 885
QY 738 CTTCGAGCCCGGCTTCTTGTGCTGTGAGAGACGAGTGGCTCCACGCAACTGTT 797
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 886 CCAAGCGGCAAGAAAGTCTTCTACTGATGACGACGCGGAGCGCGGACCGCTGCT 945
QY 798 GCTACAGCCCTGGACACTGCTGTTTGGCCG-----TCGAGGCGCGGCGCGCG 846
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 946 GCTACCGCGCGGACACTGCTCTTGTGTGGCGCGGCAACAGACTCGGCGACCGGAGCG 1005
QY 847 CCAAGGCACTTTGACACGCTGTTCGCGCGCGGCTACAGCGCTGGGAGACTCGGTGCTG 906
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1006 CAGAGGCTCTGCGGCGCGGCTCTTCGCGGCGGCGCACTGGGCGCTGCTGTT 1065
QY 907 CCGGCGGCGGATGCGCTTGGCGGACGCGGCGGCGGCGG----- 946
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1066 CCGCAGCCCGGTGCGCGCGGCGGCGGTGATGCTGTGGCCGAGCGTACGCGGAGCG 1125
QY 947 -----TGCGCGGAGAGAAAGCGGTGGCGCTGTT 974
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1126 CCGGCTCTGCGCGCGGCTGTGCACAGCGTGAACCTTAAGCGAGGCGCGCGCGCTTA 1185
QY 975 CCGCGCTTACCGCGGACAGGACGCTGCTGTAAGCATGTCTGGCTCTTGTCTACG 1034
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1186 CCGCGCGCTACAGGCGGACCACTTCTCAATCAACCGGCTGCTGCTGCTACG 1245
QY 1035 GGTTCGAGAGTCAACCAATGGGCGACCGGCTTTTGGCCCTTGAAGCTGCTGACG 1094
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1246 GGTTCATCGAGAGCAACAGTGGGCGACCGGCTTTCGCGCTTCCGCTGGCGACG 1305
QY 1095 GCTAGGCGC 1103
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Db 1306 GCTCTGCGC 1314

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RESULT 13
US-08-748-591-10
: Sequence 10, Application US/08748591
: Patent No. 5759811
: GENERAL INFORMATION:
: APPLICANT: Epstein, Ervin

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: APPLICANT: Hu, Zhilan
: APPLICANT: Bonifas, Jeanette
: TITLE OF INVENTION: Mutant Human Hedgehog Gene
: NUMBER OF SEQUENCES: 23
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Fish and Richardson
: STREET: 2200 Sand Hill Road
: CITY: Menlo Park
: STATE: CA
: COUNTRY: USA
: ZIP: 94025
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent Release #1.0, Version #1.25
: CURRENT APPLICATION DATA: US/08/748,591
: FILING DATE:
: CLASSIFICATION: 435
: ATTORNEY/AGENT INFORMATION:
: NAME: Sherwood, Pamela J
: REGISTRATION NUMBER: 36,677
: REFERENCE/DOCKET NUMBER: 06510/067001
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (415) 322-5070
: TELEFAX: (415) 854-0875
: INFORMATION FOR SEQ ID NO: 10:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 1576 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: cDNA
: US-08-748-591-10

Query Match 32.7%; Score 389; DB 1; Length 1576;
Best Local Similarity 61.8%; Pred. No. 5,1e-73;
Matches 710; Conservative 0; Mismatches 370; Indels 69; Gaps 3;

QY 18 TCTACTGCCCTTGTGCTGCTTGGACACTTGTGGCGCTGCCAGCCAGAGCTCGGCGCGG 77
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Db 172 TCTGCTAGTGTCTGCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 231
QY 78 CCGGGGCGCGGTTGGCGCGCGCGCTATGCGGCAAGCAAGCTGTCGCTGCTACTACAA 137
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 232 CAGGGGCTTGGGAAAGAGGAGC-----CCCAAAAGCTGACCCCTTTAGCTTACA 285
QY 138 GCAATTTGTGCGCGGCTGCCAGACGCGACCTGGGCGCGCAGTGGGCCAGCGAGGGAG 197
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Db 286 GCAGTTTATCCCAATGTGTGGCGGAGAGACCTTAGGCGCGCAAGGATGTAAGGGAA 345
QY 198 GGTGCAAGGGGCTCCGAGCGCTTCCGGAGCTCTGTCGCAACTACACCCGACATCAT 257
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 346 GATCTCCAGAAATCCGAGCTTTAAGCACTACCCCAATTAACACCCCGACATCAT 405
QY 258 CTTCAGAGATGAGAGAACAGTGAAGCGACCGCTGATGACCGAGCGGTGCAAGAGAG 317
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 406 ATTTAAGATGAAGAAACACCGGAGCGGACAGCTGATGACTCAGAGGTGTAAGACAA 465
QY 318 GGTGAACGCTTTGGCCATTGCCGTATGAACATGTGGCCCGGAGTGGCTTACAGATGAC 377
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 466 GTTGAACGCTTTGGCCATTGCCGTATGAACAGTGGCCAGAGTGAACCTGGGCTGAC 525
QY 378 TGAGGCTGGAGAGAGAGCGGACACCGCTAGATTCCTCTCCACTACAGAGCGCTGAC 437
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Db 526 CGAGGCTGGAGAGAGATGCGCACACCTACAGAGAGTCTTGCACACTAGAGGCGCGGC 585
QY 438 TTGAGACATCACTAGCTGACCGGACCGCAACAAGTATGGTGTGCGCGCGCTGCGC 497
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Db 586 AGTGAACATCACACGCTGACCGCGGACCGGACGCAAGTACGAGATGCGCGCGCTGCGC 645

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QY 498 AGTGAAGCCGCTGCTGAGTGGTCTTACTAGATCCCGCAGCACGCTCCAGCTGGT 557
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Db 646 GGTGGAGAGCCGCTTGTGAGTGGTGTACTAGATCCAGCACATATCCAGTGGT 705
QY 558 CAAAGCTGATTAATCACTAGTGGTGTCCGGGCGCGCTGCTTCCGGAATGCAACTGT 617
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 706 GAAAGCAGAGAACTCGGTGGCGGCAATATCGGAGGCTGCTCCCGGCTCGGCGACGT 765
QY 618 GCGGCTGTGAGGCGGAGGAAAGGCTCGGGAACTGACCCGCGGAGAACTGGT 677
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Db 766 GCACTGTGAGAGGCGGACCAAGCTGTGTAAGAGACTGAGCCCGGAGACCGCTGCT 825
QY 678 GCGGCGGATGCTGACAGCCGCGGTGTGTCAGCCGCGCTGCTGCTGACCGGGA 737
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Db 826 GCGGCGGAGAGACAGGCGCGGCTGCTGTACAGGACTTCTTCACTTCTGAGCCGGA 885
QY 738 CTTCAGAGCGCGGCTTCAATTTGTGCTGTGAGAGCAAGTGGCTTCCAGCAAACTGT 797
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Db 886 CGACGCGGCGCAAGAGGTCTTCTACGTGATGAGACGCGGAGCGCGGAGCGCTGCT 945
QY 798 GCTACGCGCTGACCTGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 846
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Db 946 GCTACCGCGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1005
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Db 1006 CGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1065
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Db 1066 CGCGAGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1125
QY 947 -----TGGCGGAGAGAACCTGCGGCTGCT 974
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Db 1126 CGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1185
QY 975 CGGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1034
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Db 1186 CGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1245
QY 1035 GGTGCTGAGAGTCAACAGTGGCGGACCGCGCTTGTGCGCTTGAAGACTGCTGACGC 1094
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1246 GGTGCTGAGAGAGTCAAGTGGCGGACCGCGCTTGTGCGCTTGAAGACTGCTGACGC 1305
QY 1095 GCTAGGCGC 1103
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Db 1306 GCTGCTGCTGCT 1314
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RESULT 14
; Sequence 1, Application US/08176427B
; Patent No. 5789543
; GENERAL INFORMATION:
; APPLICANT: Ingham, Phillip W.
; APPLICANT: Tabin, Clifford J.
; TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII(text)
; CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/08/176,427B
; FILING DATE: 30-DEC-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: HMI-006
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1277 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: both
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1277
; US-08-176-427B-1

Query Match      32.0%; Score 381.4; DB 1; Length 1277;
Best Local Similarity 62.0%; Pred. No. 1.9e-71;
Matches 692; Conservative 0; Mismatches 386; Indels 39; Gaps 4;

QY 109 CGCAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 168
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QY 169 CTGGGCGCGAGTGGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 228
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Db 175 CTAGGGCGCGAGTGAAGATGAAGAGTGAAGAGTGAAGAGTGAAGAGTGAAGAGTGAAG 234
QY 229 CTCGTGCCCACTCAACACCCGAGACATCATCTCAAGATGAGAGAGAGAGAGAGAG 288
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Db 235 CTAAACCCCAATTTCAACCCGAGACATATTTTAAGATGAGAGAGAGAGAGAGAGAG 294
QY 289 CGCTGATGACGAGCGCTGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 348
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Db 295 AGACTGATGACTCAGCGCTGCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 354
QY 349 ATGTGGCGCGAGTGGCGGCTGAGAGTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 408
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Db 355 CAGTGGCGCGGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 414
QY 409 CAGGATTCACCTCACTAGAGAGCGGCTGCTTGGACATCACTAGCTGACCGGAGCGC 468
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Db 415 GAGGAATCGCTGACACTAGAGAGGTCGCGCGCTGAGACATCAACAGCTGAGATGGGAGCGC 474
QY 469 AACAGATATGAGTGGTGGCGCGGCTGCGAGTGAAGCGCGGCTTGAAGTGGTCTACTAC 528
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 475 AGCAATGAGAGATGAGTGGCGCGGCTGCGCGCTGAGCGCGGCTTGAAGTGGTCTACTAC 534
QY 529 GAGTCCCGCAACACAGTGCAGTGTCAAACTGATTAATCACTAGTGGGCTGCGGCGC 588
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 535 GAGTCCCAAGGCGCAATCACTGCTCGTCAAAACAGAAATCAGTGGCGAGCAAAATCA 594
QY 589 GCGGCTGCTTTCGCGGAAATGCAACTGTGCGCTGTGAGACGCGGAGGAAAGGCGT 648
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 595 GAGAGCTGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 654
QY 649 CGGGAATGACCGCGAGAGAGTGGTGGCGCGGCTGCGAGTGGTGGTGGTGGTGGTGG 708
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 655 AAGGACTGAGGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 714
QY 709 ACGCCGTGCTGCTTCTGAGACCGGAGCTTGAAGCGCGGCTTATTTGTGGCTGTG 768
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Db 715 AGTACTTCTCACTTCTGAGACCGGAGTGAAGAGTGAAGAGTGAAGAGTGAAGAGTGA 774
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Db 775 GAGACGGGCGAGCCCGGGCCCGGCTACTGACGCGCGCCACCCTCTTTGTGGCC 834
Qy 829 CGAGGGCCGGCGCCCGCGCAGAGCG-ACCTTGACCGGAGTTGCGCGC----- 876
Db 835 CCCCAGACACACAGTGGAGGCGCACAGGGTCCACCACTGGCGCAGCTCTTCCGACG 894
Qy 877 -----CGGCTACGCGCTTGGGGAAGTGGTGTGGCGCCCGCGGGGATCGCTTCCGCCA 930
Db 895 AACGTGACCTGGCCCAACGTGTATGTGTGGGGAGAGGGGGAGAGAGTGTGCGCG 954
Qy 931 GCGCGGTGGCCCGTGGC---GCGGGAGAGACCGTGGCGGTGTCCCGCGCTCAC 987
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Qy 988 GCGACGGGACGCTGTGTGAGCATGTCTGCGCTTTGTGACGCGGTGTGGAGACT 1047
Db 1015 GCGCAGGACCATCTCTATCAACGCGGTGTGGCTCTGTAGCGCTCATCGAGAG 1074
Qy 1048 CACCACTGGGCGACCGCGCTTTTGGCCCTTGAGACTGCTCACGCGCTAGGGCGCTG 1107
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Qy 1108 C-----TCCCGCGGGGGCGCGTCCAGCCGACATGAGCATTTGATG 1149
Db 1135 CTCTGCGCCAGATGGGCGCATCCCTACTGCGCCACACACACACATGCGATTCATG 1194
Qy 1150 TCTCGGCTCTCTACCGCTTAGCGAGAGACTATGG 1186
Db 1195 TCACGGCTCTCTACCGCATCGGACGCTGGTGTCTG 1231

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RESULT 15
US-08-356-060A-1
; Sequence 1, Application us/08356060A
; Patent No. 5844079
; GENERAL INFORMATION:
; APPLICANT: Ingham, Phillip W.
; APPLICANT: McMahon, Andrew P.
; APPLICANT: Tablin, Clifford J.
; TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
; TITLE OF INVENTION: Proteins and Uses Related Thereto
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESS: LAHIVE & COCKFIELD
; STREET: 60 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII(text)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/356,060A
; FILING DATE: 14-DEC-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/176,427
; FILING DATE: 30-DEC-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: HMI-006CP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1277 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: both

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; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1275
; US-08-356-060A-1

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Query Match 32.0%; Score 381.4; DB 2; Length 1277;
Best Local Similarity 62.0%; Pred No. 1.9e-71;
Matches 692; Conservative 0; Mismatches 386; Indels 39; Gaps 4;

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Db 115 CCGAAAAGCTACCCCGGTACCTATAGAAGTTTATTTCCAAATGTGGCAGAAAGACC 174
Qy 169 CTGGGCGCCAGTGGGCGACAGGAGGAGGAGGTGGCAAGGGGCTCCGAGCGCTTCCGGGAC 228
Db 175 CTAGGGGCGCAGTGAAGATATGAGGGAAGATCACAGAACTCCGAGAGATTTTAAAGAA 234
Qy 229 CTGTCGCCCACTACACCCCGACATCATCTCAAGGATGAGAGACAGTGGAGCCGAC 288
Db 235 CTAAACCCCAATTTACAACTTATTTTAAAGATGAAGAGAACAGGAGACTGAC 294
Qy 289 CGCTGATGACCGAGCGTGTGAAGAGAGGTAAGCGCTTGGCCATTGCCGTGATGAC 348
Db 295 ACAGTATGATGACGAGCGGTGCAAGGACAAAGTGAATGCCCTGGCATCTCGGTGATGAC 354
Qy 349 ATGTGCGCCGAGTGGCTTACGATGACTGAGGCTGGGACGAGAGAGGCGCACACGCT 408
Db 355 CAGTGGCCCGGGGTGAAGCTGGGGTGACCGAGGCTGGGAGAGAGATGGCCATCTCC 414
Qy 409 CAGATTCACCTACAGAGAGCGGCTGTGGACATCATGACTAGCGGACCGGACCGC 468
Db 415 GAGGATGCTCACTACAGAGGAGTGGCGCGTGGACATCACACCTCGATGGGACCGC 474
Qy 469 AACAGTATGGTGTCTGCGCGCGCTCGCATGGAAGCGCGCTTGACTGGGTCTACTAC 528
Db 475 ACCAATGACGAATGTGGCCCGCTCGCGCGTGAAGCGCGCTTGACTGGGTCTACTAC 534
Qy 529 GAGTCCCGAACACAGCTCAGCTGTGCGTCAAGAGTGAATCACTACTGGGCTCCGGGCG 588
Db 535 GAGTCCAAAGCGCACATCATCTGCTCGTCAAGAGGAAATCACTAGTGGACCAAGATCA 594
Qy 589 GCGGCTGCTTCCGGAATGCACTGCGCTGTGGAGCGGAGCGGAAAGGCTG 648
Db 595 GAGGCTGCTTCCGCTGCTCAGCCACAGTGCACCTGTGAGCAATGAGGACCAAGCTG 654
Qy 649 CGGAACTGACACCGCGAGACTGGGTTTGGCGCGGATGCTCAAGCGCGGTGCTGCC 708
Db 655 AAGGACTGAGCCCTGGGAGCGCGTGTGCTGTGACGCGGAGCGCGGCTGCTTAC 714
Qy 709 AGCGGAGTGTCTGCTTCTGAGACCGGAGCTGACAGCGCGGGCTTCAATTTGTGCTG 768
Db 715 AGTGAATCTCACTTCTGCTGACCGGATGACAGCTCCGAAAGCTCTTCTACTATAC 774
Qy 769 GAGACGAGTGGCTTCCAGCAAACTGTTGTCACGCGCTGCGACCTGTGTTCCGCT 828
Db 775 GAGAGCGGCGACCCCGGGCCCGGCTGTGCTAGAGAGGCGGCCACACTGTCTTTTGGCG 834
Qy 829 CGAGGCGCGCGCGCGCGCGAGCG-ACCTTGCACCGGTGTGGCGC----- 876
Db 835 CCCCAGACACACAGTGGAGGCGCACAGGGTCCACAGTGGGCGACGCTCTTCCGACG 894
Qy 877 -----CGGCTACGCGCTTGGGGAAGTGGTGTGGCGCCCGCGGGGAGAGTGTGGGCA 930
Db 895 AACGTGACCTGGCCCAACGTGTATGTGTGGGCGAGGCGGCGGACAGAGTGTGCG 954
Qy 931 GCGCGGTGGCCCGTGTGGC---GCGGGAGAGACCGTGGCGGTGTCCCGCGCTCAC 987
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Qy 988 GCGACGGGACGCTGTGTGTAAGCATGTCTGGCTTGTCTACGCGGTGTGAGAGT 1047

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Db 1015 GCCCAGGGCACCATCTCAATCAACCGGGTGTGTGCTCCTCTAGCGCCGTCATCGAGAG 1074
QY 1048 CACCAATGGGCGACCGCGCTTTGGCCCTTGAGACTGCTGCACGCGCTAGGGCGCTG 1107
Db 1075 CACAGTTGGGCCCATTTGGGCGCTTCGCACCAATTCGCTTGGCTCAGGGGCTGTGGCGCC 1134
QY 1108 C-----TCCCCGGGCGGCGGTCACGCGACTGGCATGATGATGTAG 1149
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GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: September 7, 2001, 14:00:54 : Search time 26.04 Seconds
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313.125 Million cell updates/sec

Title: US-08-900-220C-17

Perfect score: 2088

Sequence: 1 MALTLNLPCLCLALLALPA.....PTGMHWSRLLYRLAEELLG 396

Scoring table:

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Searched: 197339 seqs, 20590346 residues

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Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Maximum Match 0%

Listing first 45 summaries

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and is derived by analysis of the total score distribution.

SUMMARIES

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6	1217	58.3	437	4	US-08-460-900C-11
7	1214	58.1	437	3	US-08-946-329A-20
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9	1214	58.1	437	4	US-08-729-743A-20
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11	1214	58.1	437	5	PCT-US95-15923-20
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13	1203	57.6	437	4	US-08-757-230A-9
14	1203	57.6	437	5	PCT-US95-02315-2
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17	1198	57.4	425	4	US-08-460-900C-8
18	1177	56.4	462	1	US-08-748-591-4
19	1177	56.4	462	1	US-08-748-591-9
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21	1177	56.4	475	4	US-08-460-900C-13
22	1158	55.5	425	3	US-08-946-329A-19
23	1158	55.5	425	4	US-08-567-357A-19
24	1158	55.5	425	4	US-08-729-743A-19
25	1158	55.5	425	5	PCT-US95-15463-19
26	1158	55.5	425	5	PCT-US95-15923-19
27	1154	55.3	416	3	US-08-946-329A-17

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29	1154	55.3	416	5	US-08-729-743A-17	Sequence 17, Appl
30	1154	55.3	416	5	PCT-US95-15463-17	Sequence 17, Appl
31	1154	55.3	416	5	PCT-US95-15923-17	Sequence 17, Appl
32	1126	53.9	411	4	US-08-460-900C-10	Sequence 10, Appl
33	1120	53.6	418	3	US-08-946-329A-18	Sequence 18, Appl
34	1120	53.6	418	4	US-08-567-357A-18	Sequence 18, Appl
35	1120	53.6	418	4	US-08-729-743A-18	Sequence 18, Appl
36	1120	53.6	418	4	US-08-757-230A-7	Sequence 7, Appl
37	1120	53.6	418	5	PCT-US95-15463-18	Sequence 18, Appl
38	1120	53.6	418	5	PCT-US95-15923-18	Sequence 18, Appl
39	1069	51.2	418	1	US-08-176-427B-10	Sequence 10, Appl
40	1069	51.2	418	2	US-08-356-060A-12	Sequence 12, Appl
41	1069	51.2	418	4	US-08-460-900C-12	Sequence 12, Appl
42	956.5	45.8	336	1	US-08-176-427B-6	Sequence 6, Appl
43	956.5	45.8	336	2	US-08-356-060A-10	Sequence 10, Appl
44	951	45.5	471	1	US-08-176-427B-11	Sequence 11, Appl
45	951	45.5	471	4	US-08-460-900C-34	Sequence 34, Appl

ALIGNMENTS

```
RESULT 1
US-08-176-427B-4
; Sequence 4, Application US/08176427B
; Patent No. 5789543
; GENERAL INFORMATION:
; APPLICANT: Ingham, Phillip W.
; APPLICANT: McMahon, Andrew P.
; APPLICANT: Tablin, Clifford J.
; TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
; TITLE OF INVENTION: Proteins and Uses Related Thereto
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII(text)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08-176,427B
; FILING DATE: 30-DEC-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: HMI-006
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 396 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-176-427B-4

Query Match 96.2%; Score 2008; DB 1; Length 396;
Best Local Similarity 96.5%; Pred. No. 2,7e-214;
Matches 382; Conservative 6; Mismatches 8; Indels 0; Gaps 0;

QY 1 MALTLNLPCLCLALLALPAQSCGPGRGPGVGRRRYARKQVPLLYKQFVGVDPERTIGAS 60
Db 1 MALPASLPLPCCLALLALSAQSCGPGRGPGVGRRRYARKQVPLLYKQFVGVDPERTIGAS 60
```


TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 832-1000
TELEFAX: (617) 832-7000
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 396 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-460-900C-9

Query Match 96.2%; Score 2008; DB 4; Length 396;
Best Local Similarity 96.5%; Pred. No. 2.7e-214;
Matches 382; Conservative 6; Mismatches 8; Indels 0; Gaps 0;

QY 1 MALTLNPLCLALLALPAQSCGPGRGVRRYARKQVLPVLYKQFVGPVPTLGAS 60
DB 1 MALPASLPLCLALLALSAQSCGPGRGVRRYARKQVLPVLYKQFVGPVPTLGAS 60
QY 61 GPAEGVARGSERFRLVYVNPDIIFKDENSGADRLMTERCKERYNALAIYVNMMPG 120
DB 61 GPAEGVARGSERFRLVYVNPDIIFKDENSGADRLMTERCKERYNALAIYVNMMPG 120
QY 121 VRLRTEGMDGDHHAODSLHYEGRALDITTSDBRNNKYGLLARLAVEAGFDWYYESRN 180
DB 121 VRLRTEGMDGDHHAODSLHYEGRALDITTSDBRNNKYGLLARLAVEAGFDWYYESRN 180
QY 181 HHVSVKADNSLAVRAGGCEPFGNATVRLMSGERKGLRELHSGDWVLAADASGRVPTVPL 240
DB 181 HHVSVKADNSLAVRAGGCEPFGNATVRLMSGERKGLRELHSGDWVLAADASGRVPTVPL 240
QY 241 LFLDRDLQRRASVAVETEMPRKLLTPMHLVFAANGPAPAGDFPVARRLRAGDSV 300
DB 241 LFLDRDLQRRASVAVETEMPRKLLTPMHLVFAANGPAPAGDFPVARRLRAGDSV 300
QY 301 LAEGDALPRAVARARVAREAVGFAPLTAHGTLLVNDVLAACVAVESHOMHRAAPL 360
DB 301 LAEGDALPRAVARARVAREAVGFAPLTAHGTLLVNDVLAACVAVESHOMHRAAPL 360
QY 361 RLHLALGALLPGAVOPTGMHWSRLLYRLAEELG 396
DB 361 RLHLALGALLPGAVOPTGMHWSRLLYRLAEELG 396

RESULT 4
US-08-176-427B-8
Sequence 8, Application US/08176427B
Patent No. 5789543
GENERAL INFORMATION:
APPLICANT: Ingham, Phillip W.
APPLICANT: McMahon, Andrew P.
TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSER: LAHIVE & COCKFIELD
STREET: 60 State Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII(text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/176,427B
FILING DATE: 30-DEC-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:

NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: HMT-006
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 437 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-176-427B-8

Query Match 58.3%; Score 1217; DB 1; Length 437;
Best Local Similarity 58.7%; Pred. No. 1.9e-126;
Matches 249; Conservative 53; Mismatches 82; Indels 40; Gaps 12;

QY 7 LILPLCLALLA-----LPAQSCGPGRGVRRYARKQVLPVLYKQFVGPVPTLGAS 61
DB 4 LILRCLVLIASSLILVCPGLACGPGRG-FGKRPRPK-LTPVLYKQFIPVVAERTLGASG 61
QY 62 PAEGVARGSERFRLVYVNPDIIFKDENSGADRLMTERCKERYNALAIYVNMMPG 121
DB 62 RYEGKITRNSERKELTPVNPDIIFKDENTGADRLMTERCKERYNALAIYVNMMPG 121
QY 122 RLRTGMDGDHHAODSLHYEGRALDITTSDBRNNKYGLLARLAVEAGFDWYYESRN 181
DB 122 RLRTGMDGDHHAODSLHYEGRALDITTSDBRNNKYGLLARLAVEAGFDWYYESRN 181
QY 182 VHYSVKADNSLAVRAGGCEPFGNATVRLMSGERKGLRELHSGDWVLAADASGRVPTVPL 241
DB 182 IHOSVKADNSLAVRAGGCEPFGNATVRLMSGERKGLRELHSGDWVLAADASGRVPTVPL 241
QY 242 LFLDRDLQRRASVAVETEMPRKLLTPMHLVFAANGPAPAGDFPVARRLRAGDSV 300
DB 242 LFLDRDLQRRASVAVETEMPRKLLTPMHLVFAANGPAPAGDFPVARRLRAGDSV 300
QY 298 DSVLA--PGD-ALRPARVARYA-REAVGVAPLTAHGTLLVNDVLAACVAVESHOM 352
DB 298 DSVLA--PGD-ALRPARVARYA-REAVGVAPLTAHGTLLVNDVLAACVAVESHOM 352
QY 353 AHRAFAPLRLIHA-LGALLP-----GGAV-----OPT-GMHWYSLYRLA 391
DB 353 AHRAFAPLRLIHA-LGALLP-----GGAV-----OPT-GMHWYSLYRLA 391
QY 392 EELL 395
DB 419 TWLL 422

RESULT 5
US-08-356-060A-11
Sequence 11, Application US/08356060A
Patent No. 5844079
GENERAL INFORMATION:
APPLICANT: Ingham, Phillip W.
APPLICANT: McMahon, Andrew P.
TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSER: LAHIVE & COCKFIELD
STREET: 60 State Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII(text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/356,060A
FILING DATE: 14-DEC-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/176,427
FILING DATE: 30-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: HMI-006CP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 437 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-356-060A-11

Query Match 58.3%; Score 1217; DB 2; Length 437;
Best Local Similarity 58.7%; Pred. No. 1.9e-126;
Matches 249; Conservative 53; Mismatches 82; Indels 40; Gaps 12;

QY 7 LRLPCLALLA-----LPAQSGPGRGPRGRRRYARKOLVPLLYKQFVGVDEPRTLGASG 61
DB 4 LLARCELVTLASSLLVCPGLACGPGRG-FGKRRHPKK-LTPLAYKQFIPVNAEKTLLGASG 61
QY 62 PAEGVARGSERFRDLVPYNYNDIIFKDEENSGADRLMTERCKERYNALAIIVMMMPGV 121
DB 62 REGKTRNSERFKELTPRYNPDIIIFKDEENSGADRLMTERCKERYNALAIIVMMMPGV 121
QY 122 RLRTVEGWEDDHHAODSLHYEGRALDITTSRDRNKKYGLLARLAVEAGFDWVYYESRNH 181
DB 122 RLRTVEGWEDDHHSSESLHYEGRAVDITTSRDRSKYGMRLARLAVEAGFDWVYYESKHA 181
QY 182 VHVSVKADNSLAVRAGGCPFGNATYRLMNGEKKGLRELHGRGWVYLAADSGRVVTPVLL 241
DB 182 IHCSVKAENSVAKSGCGPFGSATYHLDEGGTKLVKDLRPGGRVLAADQGRLLSDFLT 241
QY 242 FLDRDLORASFAVAETEMPRKLLTPMHLVFAA-----RGPARAPGDPAPVFARLRAG 297
DB 242 FLDRDEGAKKYVYIETLEPRERLLITAAHLFVAPHNDSGTPGP---SALFASRVPRG 298
QY 298 DSVLA---PGGD-ALRPARAVANA-REEAVGVAPLTAHGTLLVNDVLAACVAVLESHQW 352
DB 299 QRVYVVAERGDRLRLPAVHVSYTLREEBAGAYAPLTAHGTLLINRVLASCAVIEBHSW 358
QY 353 AHRAPAPRLLLHA-LGALLP-----GGAV-----QPT-GMHWYSLRLYRLA 391
DB 353 AHRAPAPRLHALLAALAPARTDGGGGSIPAAOSATEARGAEPTAGIHWSQLLYHIG 418
QY 392 EELL 395
DB 419 TWLL 422

RESULT 6
US-08-460-900C-11
Sequence 11, Application US/08460900C
Patent No. 6165747
GENERAL INFORMATION:
APPLICANT: Ingham, Phillip W.
APPLICANT: McMahon, Andrew P.
APPLICANT: Tablin, Clifford J.
APPLICANT: Bumcrot, David A.
APPLICANT: Marti-Gorositz, Elisa
TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing

TITLE OF INVENTION: Proteins and Uses Related Thereto
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY, HOAG & ELIOT LLP
STREET: One Post Office Square
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/460,900C
FILING DATE: 5-JUNE-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/435,093
FILING DATE: 4-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/356,060
FILING DATE: 14-DEC-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/176,427
FILING DATE: 30-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: HMI-006.05
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 832-1000
TELEFAX: (617) 832-7000
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 437 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-460-900C-11

Query Match 58.3%; Score 1217; DB 4; Length 437;
Best Local Similarity 58.7%; Pred. No. 1.9e-126;
Matches 249; Conservative 53; Mismatches 82; Indels 40; Gaps 12;

QY 7 LRLPCLALLA-----LPAQSGPGRGPRGRRRYARKOLVPLLYKQFVGVDEPRTLGASG 61
DB 4 LLARCELVTLASSLLVCPGLACGPGRG-FGKRRHPKK-LTPLAYKQFIPVNAEKTLLGASG 61
QY 62 PAEGVARGSERFRDLVPYNYNDIIFKDEENSGADRLMTERCKERYNALAIIVMMMPGV 121
DB 62 REGKTRNSERFKELTPRYNPDIIIFKDEENSGADRLMTERCKERYNALAIIVMMMPGV 121
QY 122 RLRTVEGWEDDHHAODSLHYEGRALDITTSRDRNKKYGLLARLAVEAGFDWVYYESRNH 181
DB 122 RLRTVEGWEDDHHSSESLHYEGRAVDITTSRDRSKYGMRLARLAVEAGFDWVYYESKHA 181
QY 182 VHVSVKADNSLAVRAGGCPFGNATYRLMNGEKKGLRELHGRGWVYLAADSGRVVTPVLL 241
DB 182 IHCSVKAENSVAKSGCGPFGSATYHLDEGGTKLVKDLRPGGRVLAADQGRLLSDFLT 241
QY 242 FLDRDLORASFAVAETEMPRKLLTPMHLVFAA-----RGPARAPGDPAPVFARLRAG 297
DB 242 FLDRDEGAKKYVYIETLEPRERLLITAAHLFVAPHNDSGTPGP---SALFASRVPRG 298
QY 298 DSVLA---PGGD-ALRPARAVANA-REEAVGVAPLTAHGTLLVNDVLAACVAVLESHQW 352
DB 299 QRVYVVAERGDRLRLPAVHVSYTLREEBAGAYAPLTAHGTLLINRVLASCAVIEBHSW 358
QY 353 AHRAPAPRLLLHA-LGALLP-----GGAV-----QPT-GMHWYSLRLYRLA 391
DB 353 AHRAPAPRLHALLAALAPARTDGGGGSIPAAOSATEARGAEPTAGIHWSQLLYHIG 418

OY 392 EELL 395
DB 419 TWLL 422

RESULT 7

US-08-946-329A-20
; Sequence 20, Application US/08946329A
; Patent No. 6057091
; GENERAL INFORMATION:
; APPLICANT: Beachy, Phillip A.
; APPLICANT: Porter, Jeffrey A.
; TITLE OF INVENTION: NOVEL HEDGEHOG-DERIVED POLYPEPTIDES
; NUMBER OF SEQUENCES: 109
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: FASTSEQ for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/946,329A
; FILING DATE: 07-OCT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/061,323
; FILING DATE: 07-OCT-1996
; APPLICATION NUMBER: 08/729,743
; FILING DATE: 10-JUL-1996
; APPLICATION NUMBER: 08/567,357
; FILING DATE: 04-DEC-1995
; APPLICATION NUMBER: 08/349,498
; FILING DATE: 02-DEC-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Haile, Lisa A.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 07265/140001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619/678-5070
; TELEFAX: 619/678-5099
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 437 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-946-329A-20

Query Match 58.1%; Score 1214; DB 3; Length 437;
Best Local Similarity 58.5%; Pred. No. 4,1e-126;
Matches 248; Conservative 54; Mismatches 82; Indels 40; Gaps 12;

OY 7 LPLCLALLA-----LPAQSCGPGRGVGRRRYARKOLVPLLYKQFVGVPERTLGASG 61
DB 4 LARCLVLIASSLLVCPGLACGPGRG-FGKRRHPKK-LTPLAYKQFIPVAVAKTIGASG 61
OY 62 PAGRVARSGSERFDLVPNYNDPIIFKDENSGADRLMTERCKERNVNALAIAMNMPGV 121
DB 62 RREGKTRNSERKELTPYNTPIIFKDENSGADRLMTERCKERNVNALAIAMNMPGV 121
OY 122 RLAVTEGMDGDHHAODSLAHYEGRALDITTSRDRNNKYGLLARLAVAGFDWVYESSRNH 181
DB 122 KLAVTEGMDGDHHSSESLHYEGRAVDITTSRDRSKYGLARLAVAGFDWVYESSKAH 181
OY 182 VHSVYADNSLAVRAGGCPFGNATVPLMNGERGLRELHGRGDMVLAADAGRVVPPVLL 241

DB 182 IHCYKAENSVAAKSGCGPFSATVHLEGGTKLYKDLRPPGRVLAADDOGRLLYSDFLT 241
OY 242 FLDRLQRRASVYAVTEMPKRLITPMHLYFAA-----RGAPRAGDAPVFAARLRAG 297
DB 242 FLDRGAKRVYFVETLEPRERLITTAHLLEFVARNDSGPTGP---SALFASVVRG 298
OY 298 DSVLA---PGGD-ALRPARVARVA-REAVGVAPLTAHGTLLVNDVNLASCAVLESROW 352
DB 299 QRYVYVAERGGBRRLPAVHSTVLRERAGAVAPLTAHGTLLINRYNLASCAVIEHSM 358
OY 353 AHRAPFLRLIHA-LGALLP-----GGAV-----QPT-GHWYSRLLYRIA 391
DB 359 AHRAPFLRLIHAALAPARDGGGGSIPAAQSATARGAEPYAGIHWYSQLLYHIG 418
OY 392 EELL 395
DB 419 TWLL 422

RESULT 8

US-08-567-357A-20
; Sequence 20, Application US/08567357A
; Patent No. 6132728
; GENERAL INFORMATION:
; APPLICANT: Beachy, Phillip A.
; APPLICANT: Moon, Randall T.
; APPLICANT: Porter, Jeffrey A.
; TITLE OF INVENTION: NOVEL HEDGEHOG-DERIVED POLYPEPTIDES
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: FASTSEQ for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/567,357A
; FILING DATE: 04-DEC-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/349,498
; FILING DATE: 02-DEC-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Haile, Lisa A.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 07265/080001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619/678-5070
; TELEFAX: 619/678-5099
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 437 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-567-357A-20

Query Match 58.1%; Score 1214; DB 4; Length 437;
Best Local Similarity 58.5%; Pred. No. 4,1e-126;
Matches 248; Conservative 54; Mismatches 82; Indels 40; Gaps 12;

OY 7 LPLCLALLA-----LPAQSCGPGRGVGRRRYARKOLVPLLYKQFVGVPERTLGASG 61
DB 4 LARCLVLIASSLLVCPGLACGPGRG-FGKRRHPKK-LTPLAYKQFIPVAVAKTIGASG 61
OY 62 PAGRVARSGSERFDLVPNYNDPIIFKDENSGADRLMTERCKERNVNALAIAMNMPGV 121

Db 62 RYEGKITNSRERKELTPNYPDIIFKDEENTGADRLMTQCKDKLNALAI SVMNMPGV 121
QY 122 RLRYTEGDEDEGHHADSLHAYEGRALDITTSRDRNKYGLARLAVEAGFDMWYYESRHH 181
Db 122 KLRVTEGDEDEGHHSEELHAYEGRAVDITTSRDRSKYGLARLAVEAGFDMWYYESRAH 181
QY 182 VHSYKADNSLAIVRAGCGFPGNATVRLMSGRKGLRELHRDWMVLAADASGRVPTPVLL 241
Db 182 IHCYSKAKNSVAARSGCGFPGSATVHLEQGTCLKVLDLRPDRLVLAADQGRLLYSDFLT 241
QY 242 FLDRDLQRRASFVAVETEMPRKLLTPMHLVFAA---RGAPAPGDFAPVFAARLRAG 297
Db 242 FLDRDEGAKKVFYIETLEPERELLITPAHLFVAPHNDSGPTGP---SALFASRVRRG 298
QY 298 DSVLA---PGGD-ALRPARVARVA-REEAVGVAPLTAHGTLLVNDVLASCYAVLESHQW 352
Db 299 QRVYVVAERGGDRLLPRAVHVSITLREEAGAYAPLTAHGTLLINRYLASCYAVIEESHW 358
QY 353 AHRAPAPRLIHA-LGALLP-----GGAV-----OPT-GMHYSRLLYRLA 391
Db 359 AHRAPAPRLIHALLAALAPARTDGGGGSIPAAQSATEARGAEPAGIHWSQLLYHIG 418
QY 392 EELL 395
Db 419 TWLL 422

RESULT 9
US-08-729-743A-20
Sequence 20 Application US/08729743A
Patent No. 6214794
GENERAL INFORMATION:
APPLICANT: Beachy, Philip A.
APPLICANT: Moon, Randall T.
APPLICANT: Porter, Jeffrey A.
TITLE OF INVENTION: NOVEL HEDGEHOG-DERIVED POLYPEPTIDES
NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: CA
COUNTRY: USA
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSeq for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/729,743A
FILING DATE: 07-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/567,357
FILING DATE: 04-DEC-1995
APPLICATION NUMBER: 08/349,498
FILING DATE: 02-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Halle, Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/099001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5070
TELEFAX: 619/678-5099
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 437 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-729-743A-20

Query Match 58.1%; Score 1214; DB 4; Length 437;
Best Local Similarity 58.5%; Pred. No. 4,1e-126;
Matches 248; Conservative 54; Mismatches 82; Indels 40; Gaps 12;

QY 7 LILPCCIALLA-----LPAQSCGGRGVGRRRRARAKQVLLTKQVPGPPTLQSG 61
Db 4 LLARCFVLIALSSLLVCPGLACGPRG-FGKRHRPK-LTFLAYKQFIPNAEKTLAGSG 61
QY 62 PAEGVARGSRFRDLVNYNPDIIFKDEENSGADRLMTQCKDKLNALAI SVMNMPGV 121
Db 62 RYEGKITNSRERKELTPNYPDIIFKDEENTGADRLMTQCKDKLNALAI SVMNMPGV 121
QY 122 RLRYTEGDEDEGHHADSLHAYEGRALDITTSRDRNKYGLARLAVEAGFDMWYYESRHH 181
Db 122 KLRVTEGDEDEGHHSEELHAYEGRAVDITTSRDRSKYGLARLAVEAGFDMWYYESRAH 181
QY 182 VHSYKADNSLAIVRAGCGFPGNATVRLMSGRKGLRELHRDWMVLAADASGRVPTPVLL 241
Db 182 IHCYSKAKNSVAARSGCGFPGSATVHLEQGTCLKVLDLRPDRLVLAADQGRLLYSDFLT 241
QY 242 FLDRDLQRRASFVAVETEMPRKLLTPMHLVFAA---RGAPAPGDFAPVFAARLRAG 297
Db 242 FLDRDEGAKKVFYIETLEPERELLITPAHLFVAPHNDSGPTGP---SALFASRVRRG 298
QY 298 DSVLA---PGGD-ALRPARVARVA-REEAVGVAPLTAHGTLLVNDVLASCYAVLESHQW 352
Db 299 QRVYVVAERGGDRLLPRAVHVSITLREEAGAYAPLTAHGTLLINRYLASCYAVIEESHW 358
QY 353 AHRAPAPRLIHA-LGALLP-----GGAV-----OPT-GMHYSRLLYRLA 391
Db 359 AHRAPAPRLIHALLAALAPARTDGGGGSIPAAQSATEARGAEPAGIHWSQLLYHIG 418
QY 392 EELL 395
Db 419 TWLL 422

RESULT 10
PCT-US95-15463-20
Sequence 20 Application PC/TUS9515463
GENERAL INFORMATION:
APPLICANT: The Johns Hopkins University School of Medicine
TITLE OF INVENTION: NOVEL HEDGEHOG-DERIVED POLYPEPTIDES
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: CA
COUNTRY: U.S.A.
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/15463
FILING DATE: 01-DEC-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Halle, Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/080W01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5070
TELEFAX: 619/678-5099
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 437 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein


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QY 122 RLRTVEGMDGHHADSLHYEGRALDITTSRDNRKYGILLARLAVEAGFDWYYESRNH 181
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 122 KLRTEGMDGHHSESLHYEGRAVDITTSRDNRKYGILLARLAVEAGFDWYYESKAR 181
QY 182 VHVSVKADNSLAVRAGGCPGNATVRLMSGKGLRELHGRDGVLAADASGRVPTPVLL 241
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 182 IHCSTVAENSVAKSDGCPGSAATVHLDEGGTKLVKDLSPGDRVLAADOGRLYSDFLT 241
QY 242 FLDRDLQARASFAVATEMPRKILLTPMHLVFAA-----RGPAPAGDPAPVYARLRAG 297
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 242 FLDRDGAKKVYVETREPRERILLTAHLLEFVAPHNDSGPRPG---SPLFASRVPRG 298
QY 298 DSVLA---PGGD-ALRPANVARVA-REAVGVFAPILTAHGTLLVNDVLAACVALESROW 352
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 298 QRYVYVAERGGDRILLPAVHVSVTLREEAAGAVAPLTADGTLINRVLASCAVIEHSHW 358
QY 353 AHRAFAPLRLHA-LGALLPG-----GAVOPTGMHWYSRLLYRLA 391
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 353 AHRAFAPLRLHALAALAPARTDGGGGGIPAPQSVARAGAPPAIGHWSQLLYHIG 418
QY 392 EELL 395
||
Db 419 TWLL 422

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RESULT 13
US-08-757-230A-9
; Sequence 9, Application US/08757230A
; Patent No. 6235885
; GENERAL INFORMATION:
; APPLICANT: Thomas M. Jessell, et al.
; TITLE OF INVENTION: RAT HEDGEHOG PROTEIN-1 (VHH-1)
; FILE REFERENCE: 0575/45375-1/JPM/SHS/MVM
; CURRENT APPLICATION NUMBER: US/08/757/230A
; CURRENT FILING DATE: 1996-11-27
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Rat
US-08-757-230A-9

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```

Query Match          57.6%; Score 1203; DB 4; Length 437;
Best Local Similarity 57.8%; Pred. No. 6.8e-125;
Matches 245; Conservative 52; Mismatches 87; Indels 40; Gaps 10;

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```

QY 7 LPLPCL-----ALALPAQSGPGRGPGVRRRYARKOLVPLLYKQFVGPVPTLGASG 61
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 4 LLARCFVLVALASSLLVCPGLACGPRG-FGKRQHPKK-LTPLAYKQFINVAEKLIGASG 61
QY 62 PAEGRYARGSEPRDLVPNYNDIIFKDEENSGADRLMTERCKERYNALAIAMNMPGV 121
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 62 RYEGKITRNSERFKELTPYNYNDIIFKDEENTGADRLMTERCKDKLNALAIAMNMPGV 121
QY 122 RLRTVEGMDGHHADSLHYEGRALDITTSRDNRKYGILLARLAVEAGFDWYYESRNH 181
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 122 KLRTEGMDGHHSESLHYEGRAVDITTSRDNRKYGILLARLAVEAGFDWYYESKAR 181
QY 182 VHVSVKADNSLAVRAGGCPGNATVRLMSGKGLRELHGRDGVLAADASGRVPTPVLL 241
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 182 IHCSTVAENSVAKSDGCPGSAATVHLDEGGTKLVKDLSPGDRVLAADOGRLYSDFLT 241
QY 242 FLDRDLQARASFAVATEMPRKILLTPMHLVFAA-----RGPAPAGDPAPVYARLRAG 297
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 242 FLDRDGAKKVYVETREPRERILLTAHLLEFVAPHNDSGPRPG---SPLFASRVPRG 298
QY 298 DSVLA---PGGD-ALRPANVARVA-REAVGVFAPILTAHGTLLVNDVLAACVALESROW 352
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 298 QRYVYVAERGGDRILLPAVHVSVTLREEAAGAVAPLTADGTLINRVLASCAVIEHSHW 358

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QY 353 AHRAFAPLRLHA-LGALLPG-----GAVOPTGMHWYSRLLYRLA 391
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 353 AHRAFAPLRLHALAALAPARTDGGGGGIPAPQSVARAGAPPAIGHWSQLLYHIG 418
QY 392 EELL 395
||
Db 419 TWLL 422

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RESULT 14
PCT-US95-02315-2
; Sequence 2, Application PC/TUS9502315
; GENERAL INFORMATION:
; APPLICANT: Jessell, Thomas M.
; APPLICANT: Dodd, Jane
; APPLICANT: Roelink, Henk
; APPLICANT: Edlund, Thomas
; TITLE OF INVENTION: DNA ENCODING A VERTEBRATE HOMOLOG OF
; TITLE OF INVENTION: HEDGEHOG, VHH-1, EXPRESSED BY THE NOTOCHORD, AND USES
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESS: Cooper & Dunham
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/02315
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: John P. White
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 45375-A-PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 391-0525
; TELEFAX: (212) 278-0400
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 437 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US95-02315-2

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```

Query Match          57.6%; Score 1203; DB 5; Length 437;
Best Local Similarity 57.8%; Pred. No. 6.8e-125;
Matches 245; Conservative 52; Mismatches 87; Indels 40; Gaps 10;

```

```

QY 7 LPLPCL-----ALALPAQSGPGRGPGVRRRYARKOLVPLLYKQFVGPVPTLGASG 61
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 4 LLARCFVLVALASSLLVCPGLACGPRG-FGKRQHPKK-LTPLAYKQFINVAEKLIGASG 61
QY 62 PAEGRYARGSEPRDLVPNYNDIIFKDEENSGADRLMTERCKERYNALAIAMNMPGV 121
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 62 RYEGKITRNSERFKELTPYNYNDIIFKDEENTGADRLMTERCKDKLNALAIAMNMPGV 121
QY 122 RLRTVEGMDGHHADSLHYEGRALDITTSRDNRKYGILLARLAVEAGFDWYYESRNH 181
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 122 KLRTEGMDGHHSESLHYEGRAVDITTSRDNRKYGILLARLAVEAGFDWYYESKAR 181
QY 182 VHVSVKADNSLAVRAGGCPGNATVRLMSGKGLRELHGRDGVLAADASGRVPTPVLL 241
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 182 IHCSTVAENSVAKSDGCPGSAATVHLDEGGTKLVKDLSPGDRVLAADOGRLYSDFLT 241

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OY 242 FLDRLPLOSRAASVAANETMPKILLTFPMHVEFA-----RGPARPGDFAPVARLRNG 297
Db 242 FLDRLPLOSRAASVAANETMPKILLTFPMHVEFA-----RGPARPGDFAPVARLRNG 298
OY 298 DSVLA---PGGD-ALRPARVARVA-REBAVGFAFLTAGTLLVNDVLASCAVLESHOM 352
Db 298 DSVLA---PGGD-ALRPARVARVA-REBAVGFAFLTAGTLLVNDVLASCAVLESHOM 353
OY 359 AHRAPAPRLALHALLAALAPARTDGGGGGSIAPQSVAEARGAGPAGIMWSQLLYHIG 418
Db 359 AHRAPAPRLALHALLAALAPARTDGGGGGSIAPQSVAEARGAGPAGIMWSQLLYHIG 419
OY 392 EELL 395
Db 419 TWLL 422

RESULT 15
US-08-176-427B-2
Sequence 2, Application US/08176427B
Patent No. 5789543
GENERAL INFORMATION:
APPLICANT: Ingmahon, Phillip W.
APPLICANT: Mcmahon, Andrew P.
APPLICANT: Tablin, Clifford J.
TITLE OF INVENTION: Vertebrate Embryonic Pattern-Inducing
TITLE OF INVENTION: Proteins and Uses Related Thereto
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESSES:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII(text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/176,427B
FILING DATE: 30-DEC-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: BH1-006
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 425 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-176-427B-2

Query Match 57.4%; Score 1198; DB 1; Length 425;
Best Local Similarity 59.4%; Pred. No. 2.3e-124;
Matches 244; Conservative 56; Mismatches 91; Indels 20; Gaps 10;

OY 1 MALLNLPLP---LCLTALLALPASCGRGVRGRRYARKOVLPLTKQFVPGVPERTL 57
Db 4 MLLLRILLVIGTC--ALLVSSGLTCGRGRG-IGRRRHKK-LTPLATKQFIPNVAEKTLL 59
OY 58 GASGPAEGRVARGSERFRDLVNPYNDIIFKDEENSGADRLTERCKEKEVNALATAVMM 117
Db 60 GASGPAEGRVARGSERFRDLVNPYNDIIFKDEENSGADRLTERCKEKEVNALATAVMM 119
OY 118 WGVGLRATYETGDEGCHHAKDSLHIEGRALDITTSDDRDNRKIGLLARLVAEAGFDWYIE 177

```

Db 120 WPGYKLRNTBEWDEDDGHHSESLYBEGRAVDITTSDDDRSKYGMALALAYEAGEFDWYYE 179

QY 178 SRNHVHSVKAQNSLAVRAGSGCFPGNATVRLMSEGRKGLBELHRGDWYLAADSGRVYPT 237

Db 180 SKAHHCSVKAENSVAAKSGGCFPGSATSVHLHERGTVLVDELSPGDVYLAADGRLYLS 239

QY 238 PVLLEFLDLDORRASFVAVENTEMPRLRLTTPMLVLEAA--RGEPAPAGDFA--PYEARR 2933

Db 240 DELFLFIDMDESSRKLFEYIEROPRRARLLTAAILLVAAPOHQNSEATGTSQALFASN 299

QY 294 LRAGGS--VLA PGDGLRPAVAVA--REAVGYEAPFLTAGTLVNDVLAACYAVEESH 350

Db 300 VKPGQRYVVLQEGGOQLLPAYHVSVLREELSGAYALDLOGTILINRYLVAACAYAVEEH 359

QY 351 QMAHRAFPRLHLHA--LGALLPGAV-----QPPGMHYSRLYRLAEELL 395

Db 360 SMAHNAEAPFLAOGLLAALCPDQALPAAATTTTGTHIMYSRLYRIGTSWVL 410

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Job time: 2406 sec

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